BEFORE

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2023-9-E

In re:

Dominion Energy South Carolina, Incorporated's 2023 Integrated Resource Plan (IRP) SIERRA CLUB'S FIRST SET OF DATA REQUESTS MARCH 9th, 2023

Pursuant to R.103-833 of the South Carolina Code of Regulations, Intervenor Sierra Club, by and through undersigned counsel, serves the following data requests on Dominion Energy South Carolina, Inc. ("Dominion" or the "Company") in the above referenced docket.

These requests are continuing in nature to the extent permitted by the rules of the South Carolina Public Service Commission and the South Carolina Rules of Civil Procedure.

INSTRUCTIONS

- These requests should be regarded as continuing. If, after filing its initial response to the
 interrogatories and requests, the Company becomes aware of any information that would
 alter or amend any responses, please provide updated responses as additional information
 becomes available.
- 2. If a response to any of the attached requests requires any calculations, analyses, assumptions, or studies, please identify and provide copies of such calculations, analyses, assumptions, or studies—including all work papers relating thereto. For any analyses or calculations prepared using electronic workbooks, please provide operational versions of those spreadsheets as well as all operational versions of all supporting workbooks used to develop inputs.

- 3. Produced documents should include originals and all other copies which are not absolutely identical as well as all drafts and notes (whether typed, handwritten or otherwise) made or prepared in connection with such documents, whether used or not.
- 4. With respect to requests for analyses or calculations that were prepared using electronic workbooks, please provide operational versions of those spreadsheets (i.e., with calculations active) as well as all operational versions of all supporting workbooks used to develop inputs.
- 5. Unless otherwise specified, all requests for documents herein pertain to the Company's South Carolina operations. Please ensure that all responses are specific to the Company's South Carolina service territory. Where South Carolina-specific data are not available, please provide an appropriate factor, method or percentage to allow for an accurate estimate of South Carolina-specific data to be performed.
- 6. If you consider any document to be privileged or protected from production, then you must:

 (i) include in your response a list of documents withheld from production, (ii) identify each document by date, addressee, author, title and subject matter, (iii) identify those persons who have seen the document or who were sent copies, and (iv) state the ground(s) upon which each such document is considered privileged or protected.
- 7. Responsive documents should be provided as they become available and should not be withheld until a complete response to all requests is available. Please deliver all responses to the following interrogatories and requests for production of documents **electronically** to:

Robert Guild

<u>bguild@mindspring.com</u>

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DEFINITIONS

- The "Company" is defined to include both the Dominion Energy South Carolina, Inc. and
 any consultants or other agents that assisted in the development or preparation of the plan for
 electric distribution grid transformation projects.
- 2. "Communications" shall mean all oral communications and all written communications, including all "documents," as defined below.
- 3. "Describe" means to state in detail each and every basis for the position taken or the statement made in response to the request and includes identifying each and every statement or document relied on and provide a copy of all such identified documents.
- 4. "Document" is defined to include all materials, of any kind or description, in any medium, regardless of where or how maintained or accessed (such as in or through official work or personal files, accounts, or devices). Documents include, by way of illustration only, correspondences, papers (including working papers), electronic mail (including any attachments), telegrams, facsimiles, notes, sound or video recordings, voice mail, minutes, memoranda, inter- or intra-office communications, diaries, daily logs, records, reports, studies, estimates, surveys, written forecasts, analyses, contracts, licenses, agreements, charts, graphs, indexes, database or other electronic records, statistical records, data sheets, data processing cards, computer printouts, computer discs, videotapes, motion pictures, agendas, meeting invitations, websites, intranet pages, and other electronic communications, any notes or drafts relating to any of the foregoing, and any other documents of any kind in your possession, custody or control or to which you have access or known to exist..

- 5. "Identify," "identification," as used with respect to a person means to state the person's full name and present address and his present or last known employment position and business affiliation if a natural person, and corporate or other status and address if not a natural person. "Identify" or "identity" when used in reference to a document means to state the following as to each document:
 - a. Its nature and contents;
 - b. Its date;
 - c. The date it was executed if different from the date it bears;
 - d. The name, address and position of its author or signer;
 - e. The name, address and position of its addressee, if any;
 - f. Its present location and the name, present address and position of the person or persons having present custody; and
 - g. Whether it has been destroyed, and if so, with regard to such destruction; (i) the date of destruction; (ii) the reason for destruction; and (iii) the identity of the person who destroyed the document.
- 6. "Including" means "including but not limited to."
- 7. "Person" includes any individual, sole proprietorship, partnership, corporation, association, trust, statutory trust, joint venture, or other entity.
- 8. "You" or "your" means Dominion and its agents, employees, representatives, attorneys, experts, investigators, insurers, consultants, or anyone acting on behalf of Dominion.

DATA REQUESTS

Request 1-1. Please provide copies of any interrogatories or other data requests or formal discovery requests served in this proceeding by the Company or any other party or intervenor, when that discovery request is served. If any data request has already been served, please provide a copy of the Company's response to this request. Where available, please provide copies electronically in the native file format. This is an on-going request.

Request 1-2. Please provide copies of any and all responses (including objections) provided by the Company in this proceeding to any data request, interrogatory or request for the production of documents (including any informal request) that was served on the Company by any other party or intervenor. Please provide such response or objection whenever it is provided or amended. If any such response or objection has already been provided to any other party or intervenor, please provide that response or objection as part of the Company's response to that request. Where available, please provide copies electronically in the native file format. This is an on-going request.

Request 1-3. Sierra Club appreciated the supporting data provided by DESC on the 2023 IRP Sharepoint site, but some files cannot be located. Please produce the following data files with the formulas intact:

- A. Workbook titled "2022 v2 ATBaseline 7-21-2022_with_IRA_adjustments 12-05-22.xlsx (This file is referenced in the "Construction Capital Costs 2022_12_05 CONFIDENTIAL.xlsx" file, but is not provided in the current list of workbooks.)
- B. Workbook titled "Basis for DESC IRP Solar Build Limitation 20220609 CONFIDENTIAL.xlsx"

Request 1-4. Produce a description of the values used to calculate fixed fuel costs in the workbook titled "FixedFuel FOM OnGoingCapital datasheet builder 2022_12_05 CONFIDENTIAL.xlsx"

- A. For new thermal units, the cells in row 4 across columns K-Q on the "FixedFuel" tab include numbers that appear to reference a daily gas offtake volume, plant heat rate, plant output and gas cost. Please confirm the values, units and formula for calculating the fixed fuel cost.
- B. For the new thermal build fixed fuel costs, please confirm what the assumption on gas volume and cost to deliver the gas volume are based on (i.e. does this include financing, building/expanding pipelines?)

Regarding the generator heat rates provided in the PLEXOS input datafiles, please clarify whether the heat rates modeled are in Lower Heating Value (LHV) or Higher Heating Value (HHV), and whether they represent gross load or net load heat rates.

Reference DESC's comments in response to the Comments of Sierra Club on the 2022 IRP. DESC stated that "[t]o replace the energy and capacity that Williams provides to Charleston customers would require batteries capable of providing 600 MW of power for weeks or months at a time and would require them to be continuously recharged." Please explain the basis for this statement, specifically addressing:

A. Why sustained output of power for weeks or months at a time would be required from a battery storage system.

- B. A detailed explanation of any analysis conducted by DESC to evaluate the potential for battery storage replacement at Williams or other locations within the Charleston area.
- C. Workpapers, in native format with formulas intact, associated with any analysis conducted to validate this claim.

Request 1-7. Reference the Astrapé Planning Reserve Margin Study, Base Case Interconnected PRM scenario.

- A. In the Astrapé Planning Reserve Margin Study, Figure 2 Study Model Configuration provides interface connections to immediate first tier interconnected BAAs. Please confirm whether or not all neighboring BAAs were modeled at the individual resource level and hourly load with similar methods and granularity implemented in the DESC BA.
- B. Please confirm if any import capability was assumed for first tier interconnected BAAs from second tier interconnected BAAs (i.e. did Southern Company assume any import capability from TVA or Entergy service territories).
- C. Provide a detailed explanation of how the first tier interconnected BAA resource mix was adjusted based on planned additions, retirements, and forecasted load.

Reference the Astrapé Planning Reserve Margin Study, Table ES 4 and Table 15 provide the Winter ELCC Results for storage levels reaching up to 800 MW.

However, in the DESC PLEXOS model, batteries added after 800 MW were assigned a 50% ELCC credit. Please produce all workpapers, in native format with formulas intact, including all analysis associated with batteries installed after the 800 MW threshold receiving a 50% marginal ELCC credit.

Request 1-9. Produce all supporting workpapers in a machine readable, excel format with formulas intact, for the following assumptions used in the Astrapé Reserve Margin Study:

- A. The 42 years of hourly load profiles developed for DESC.
- B. The Monthly Hydro Capacity and Energy by Weather Year data.

Respectfully submitted this 9^{th} day of March 2023.

on behalf of

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BEFORE

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2023-9-E

In re:

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CERTIFICATE OF SERVICE

I hereby certify that I have served the persons listed on the official service list for Docket No. 2023-9-E, listed below, a copy of Sierra Club's First Set of Data Requests via electronic mail on this day, March 9th, 2023.

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